Office Action Summary

Application No.	Applicant(s)
08/964,257	TERASHIMA ET AL
Examiner	**Group Art Unit**
NGUYEN, M.	2722

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-33 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-6, 11-23, 26-33 is/are rejected.

☒ Claim(s) 7-10, 24-25 is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been ☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____.

Attachment(s)

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5, 6

☐ Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 11, 14, 19-20, 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kojima et al (US Patent No. 964,257).

Concerning claim 1, Kojima discloses an apparatus (Figs.2, 3) equipped with a scanner comprising a base unit (1, Fig.2); a scanner unit (3, Fig.2; col. 2, lines 33-37) which can be removably mounted on the base unit 1 wherein the base unit includes at least a part of sheet transporting mechanism (4, Fig.3) and scanner mounting means (37, Fig. 4) for mounting detachably the scanner unit 3, and wherein the scanner unit 3 includes at least reading means (sensor unit in Fig.4; col. 39-41), other part of the sheet transporting mechanism (col. 37-51), and engaging means (23, 24, Fig.4) adapted for engaging the scanner mounting means for thereby securing the scanner unit onto the base unit 1 (col. 3, lines 37-39).

Concerning claims 2 and 3, Kojima further teaches that the scanner unit 1 is so implemented as to be capable of operating as a handy scanner in the state where the scanner unit

has been detached from the base unit (claim 2), (col. 2, lines 33-41) and wherein the base unit includes a printer unit (1, Fig.2; col. 32-33).

Concerning claim 11, Kojima further teaches a mark indicating a reading region is provided on the scanner unit 3 (triangle with dots on the surface of the scanner unit 3).

Concerning claims 14, Kojima further teaches that the scanner unit 3 includes a feed roller (25, Fig.4) so that scanner unit 3 operate as a handy scanner of a running type by using the feed roller 25.

Concerning claims 19-20, Kojima further teaches that either one of engaging portions of the base unit 1 and the scanner unit 3 is constituted by a pivotal shaft (27, Fig.4) for allowing the scanner unit to rotate frontwards, while the other engaging portion is implemented as a groove (28, Fig.4) or alternatively as a recess for receiving and holding snugly the pivotal shaft (col. 3, lines 35-51).

Concerning claims 21- 23, Kojima further teaches a lock means including a claw and projecting member adapted to engage the claw for thereby locking the scanner unit in the state mounted on the base unit (claim 21), (23, 24, Fig.4; col. 3, lines 37-39, lines 54-58), and a rotation limiting stopper means for preventing the scanner unit 3 from swinging excessively frontwards upon detachment of the scanner unit from the base unit (claims 22-23), (31, 36, Fig.4; col. 35-38).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 4-6, 12, 13, 15-18, 26-29, 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima as applied to claim 1 above, and further in view of Tamura (US Patent No. 5,602,650).

Concerning claims 4-6, 28-29, Kojima teaches that the base unit is of an automatic sheet feeding type (Figs.3, 4) and it includes a first sheet transporting path (13, Fig.2) while the scanner unit is of an automatic sheet feeding type and includes a second sheet transporting path (6, Fig.2) wherein the first and second sheet transporting paths extend substantially in parallel and adjacent to each other.

Kojima fails to teach that the first sheet transporting path and second sheet transporting path extends substantially vertically. Tamura et al discloses an information processing apparatus equipped with a detachable image reader comprising a base unit (2, Fig.2), a handy scanner (3, Fig1). In Fig.4, the top region of the body 2 which is covered and uncovered by the printer cover 10 is provided with a paper insertion port 11a and a document insertion port 12 in that order from its front end. The paper insertion port 11a is an opening for insertion of recording paper into a printer 21, and the document insertion port 12 is an opening for inserting the document with an image to be read by the image reading device 3 mounted in the body 2. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the teaching of the paper insertion port 11a and the document insertion port 12 to the apparatus in Kojima since if the apparatus in Kojima is place upright on its back side, the first sheet transporting path and the second sheet transporting path are extending vertically. That combination would provide an improve printing and scanning apparatus with smaller space.

Concerning claims 12, 13 and 30, Kojima fails to teach a cable for electrically coupling the scanner unit 3 to the base unit 1. Tamura et al teaches a handy scanner 3 with a cable (31, Fig.1) coupled the scanner 3 with the base unit 2 (Fig.1). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a cable to electrically connect the handy scanner 3 with the base unit 1 in Kojima's apparatus in order for the scanner to manually scan document data without having a separate battery or power supply.

Concerning claims 15, 16-17, Kojima fails to teach a driving motor for driving feed rollers so that the scanner unit can operate as a handy scanner of an automatically running type by using the feed rollers. Tamura et al discloses a sheet transporting mechanism for the scanner unit 3 includes feed rollers (122, Fig.7 or 11) . Since Tamura teaches the rotation of the feed rollers to manually scan document 15 (Fig.6), Tamura inherently teaches a driving motor inside the scanner unit 3 for driving the feed rollers so that the scanner unit 3 can operate as a handy scanner of an automatically running type by using the feed rollers 122 (col. 7, lines 23-58). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the teaching of the feed rollers and the driving motor in the scanner unit 3 in Tamura et al to the handy scanner unit 3 in Kojima so that the handy scanner unit 3 in Kojima is a running type handy scanner which can automatically scan a document by using the feed rollers 25.

Concerning claim 18, Kojima further teaches that the base unit 1 includes a printer unit (col. 32-33); wherein a sheet transporting mechanism of the printer unit includes a feed roller (8, Fig.4). Kojima inherently discloses a driving motor for driving the feed roller since Kojima teaches the rotation of the feed roller 8 (col. 39-51). Kojima further teaches that the sheet transporting mechanism for the scanner unit 3 includes a sheet transporting roller 25.

Kojima fails to teach that the scanner unit 3 includes an encoder for detecting an amount of rotation of the sheet transporting roller so that the scanner unit can be operated as a manual type handy scanner. Tamura teaches a handy image reading device 3 including a roller 122 and a photo sensor 124. As shown in Fig.6, upon sliding of the image reading device 3 on the

document 15, the roller 122 in contact with the document 15 starts to rotate, and the rotation of the roller 122 causes rotation of the slit plate 123. The rotation of the slit plate 123 is detected by the photo sensor 124. Each time the roller 122 rotates a given distance, the photo sensor 124 detects the slits of the slit plate 123 and outputs an encoder signal. This encoder signal is a digital signal designed so that its signal level is switched from a low level to a high level each time the photo sensor 124 detects the respective slits of the slit plage 123 (col. 7, lines 23-58).It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the teaching of the feed roller 122 and the photo sensor 124 in Tamura to the handy scanner 3 in Kojima so that the handy scanner 3 in Kojima can manually scan document since it was commonly known that a handy scanner is also a manual type handy scanner.

Concerning claims 26, 31, 32, Kojima discloses an apparatus equipped with a scanner as discuss in claim 1 above. Kojima further teaches that the scanner unit includes a reading means, engaging portion for engaging the scanner mounting means for there by securing the scanner unit onto the basic unit (Fig.4; col. 3, line 35 col. 4).

Kojima fails to teach a driving motor used for running the scanner unit when it is further used for running the scanning unit when the scanner unit is detached from the base unit 1 and operates as a handy scanner. Tamura teaches a handy image reading device 3 including a roller 122 and a photo sensor 124. As shown in Fig.6, upon sliding of the image reading device 3 on the document 15, the roller 122 in contact with the document 15 starts to rotate, and the rotation of the roller 122 causes rotation of the slit plate 123. The rotation of the slit plate 123 is detected

by the photo sensor 124. Each time the roller 122 rotates a given distance, the photo sensor 124 detects the slits of the slit plate 123 and outputs an encoder signal. This encoder signal is a digital signal designed so that its signal level is switched from a low level to a high level each time the photo sensor 124 detects the respective slits of the slit plage 123 (col. 7, lines 23-58). Since Tamura teaches the rotation of the feed rollers to manually scan document 15 (Fig.6), Tamura inherently teaches a driving motor inside the scanner unit 3 for driving the feed rollers so that the scanner unit 3 can operate as a handy scanner of an automatically running type by using the feed rollers 122 (col. 7, lines 23-58). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the teaching of the feed roller 122, the driving motor and the photo sensor 124 in Tamura to the handy scanner 3 in Kojima so that the handy scanner 3 in Kojima can manually scan document since it was commonly known that a handy scanner is also a manual type handy scanner.

Concerning claim 27, Kojima teaches that the base unit includes a printer unit (1, Fig.2; col. 32-33).

Concerning claim 33, Kojima further teaches that either one of engaging portions of the base unit 1 and the scanner unit 3 is constituted by a pivotal shaft (27, Fig.4) for allowing the scanner unit to rotate frontwards, while the other engaging portion is implemented as a groove (28, Fig.4) or alternatively as a recess for receiving and holding snugly the pivotal shaft (col. 3, lines 35-51).

Allowable Subject Matter

5 Claims 7-10, 24, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7-10 require a pick roller, made of a material having low hardness, disposed at a location upstream of the second sheet transporting path of the scanner unit and feed rollers disposed at locations downstream of the second sheet transportation path, auxiliary rollers, disposes at locations outside of a reading region of the scanner unit, which are made of material having high hardness and disposed at sides of the pick roller. Claims 24-25 requires a sheet feeding means formed in a wedge-like shape as viewed in a vertical section by a pair of sheet guides disposed in opposition to each other so that a space defined between the pair of sheet guides becomes gradually narrower toward a sheet withdrawal port; and offset means provided for at least one the paired sheet guides for limiting step wise moving of the sheet toward the sheet withdrawal port.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Shimizu (US Patent No. 5,663,811) discloses a facsimile device having automatic detection of regular and manual scanning modes.

b. Kotani et al (US Patent No. 4,989,237) teaches an image data transmission apparatus which includes an image reading unit for reading the original image manually.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine Anh-Vinh Nguyen whose telephone number is (703) 305-4860.

7. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 308-9051 (for formal communication at s intended for entry)

(703) 308-5397 (for informal or draft communications, such as proposed amendments to be discussed an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington. VA.
Sixth Floor (Receptionist)

Anh Vinh Nguyen

MADELEINE NGUYEN
PATENT EXAMINER

March 20, 1999